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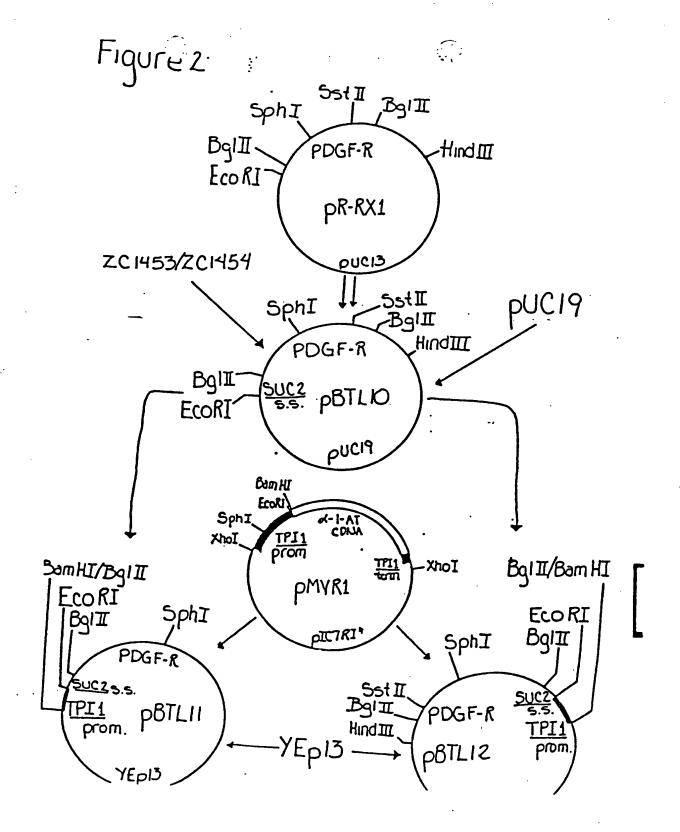
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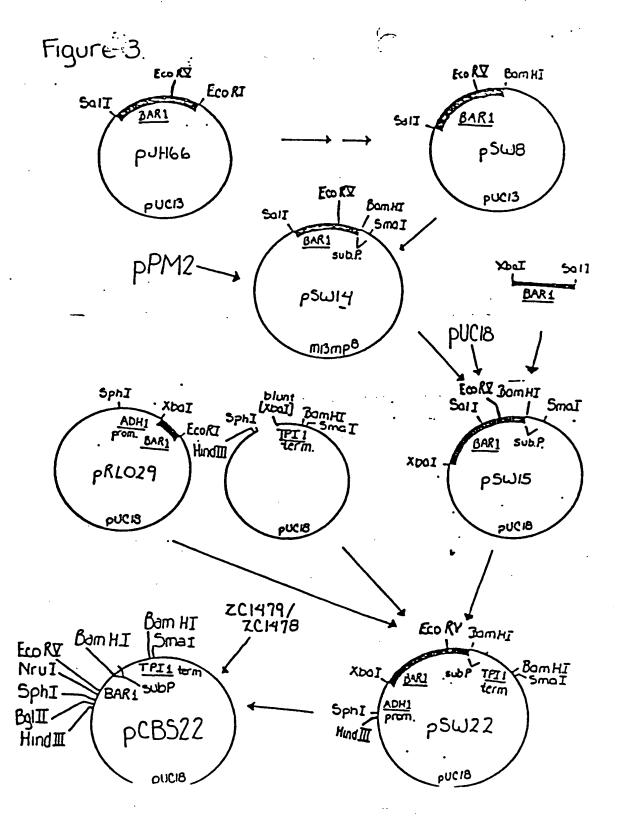
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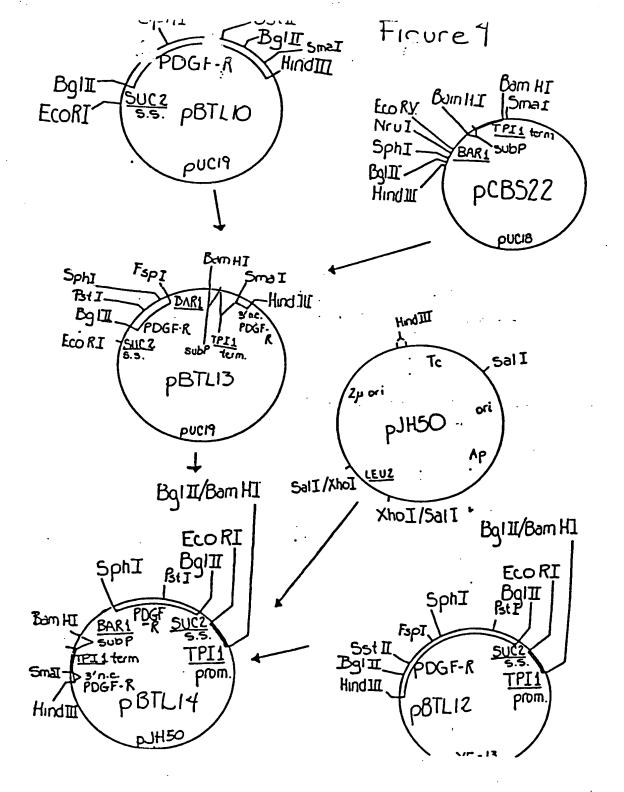
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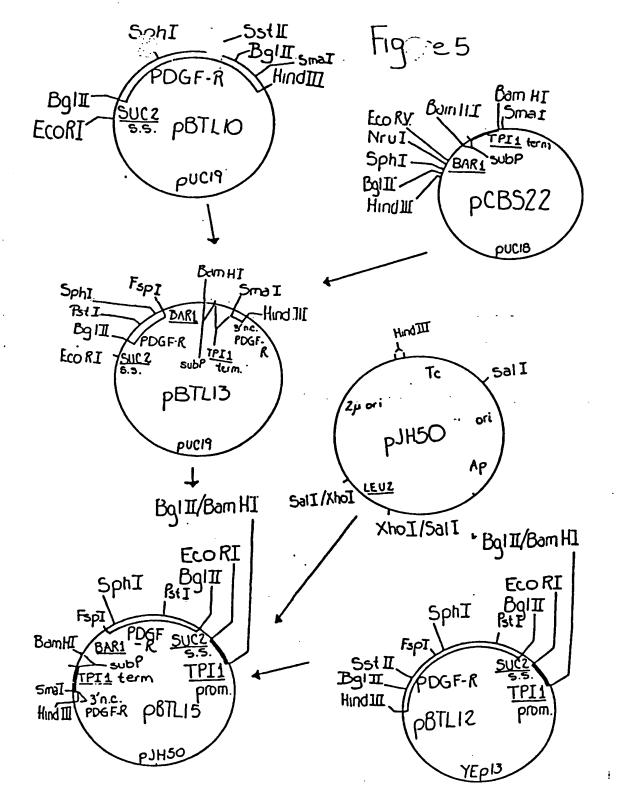
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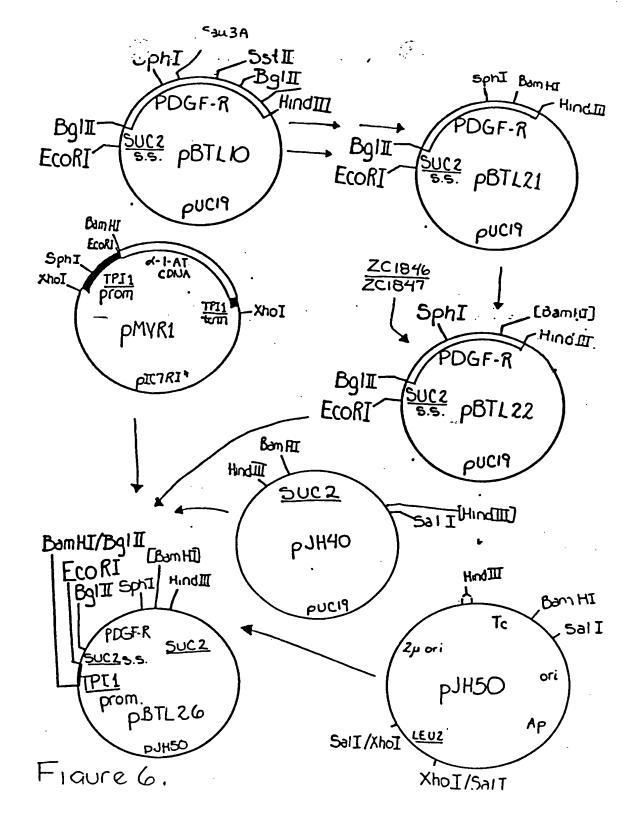
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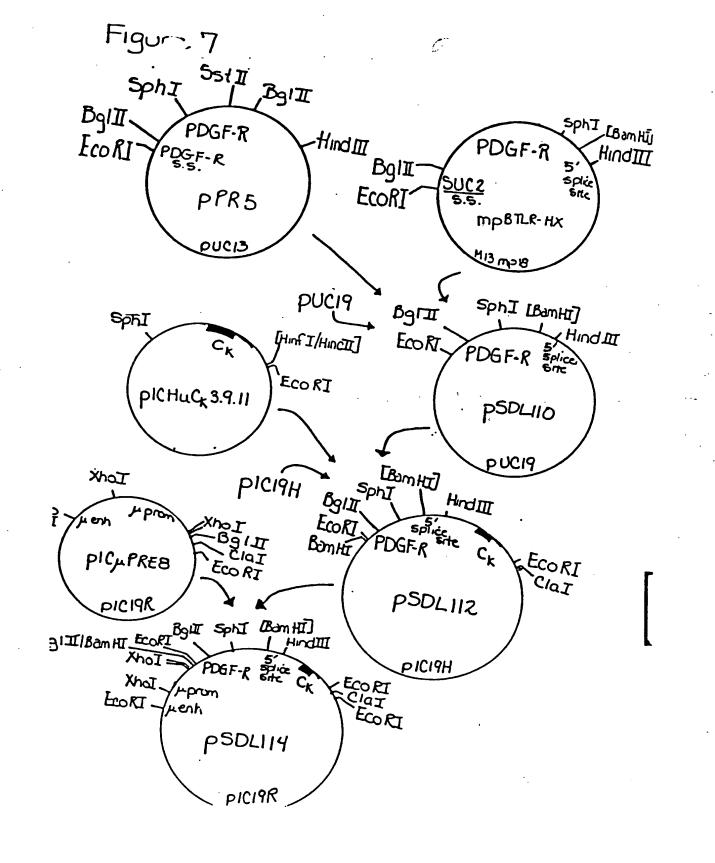
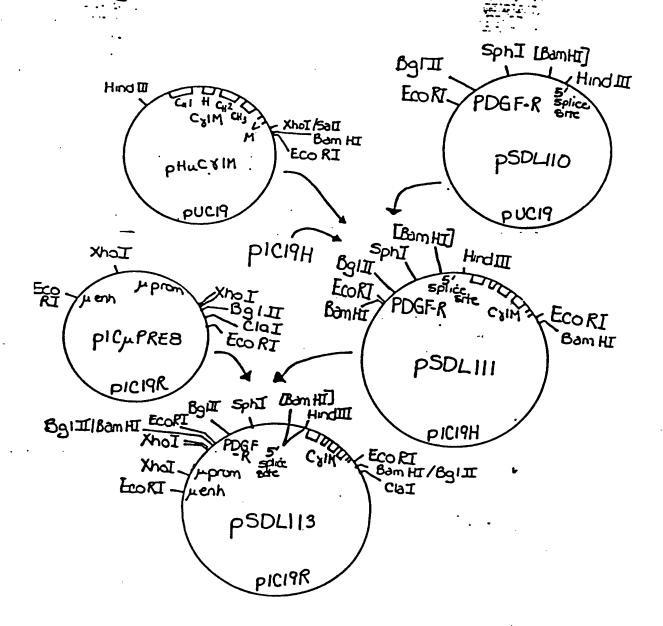


Figure 8



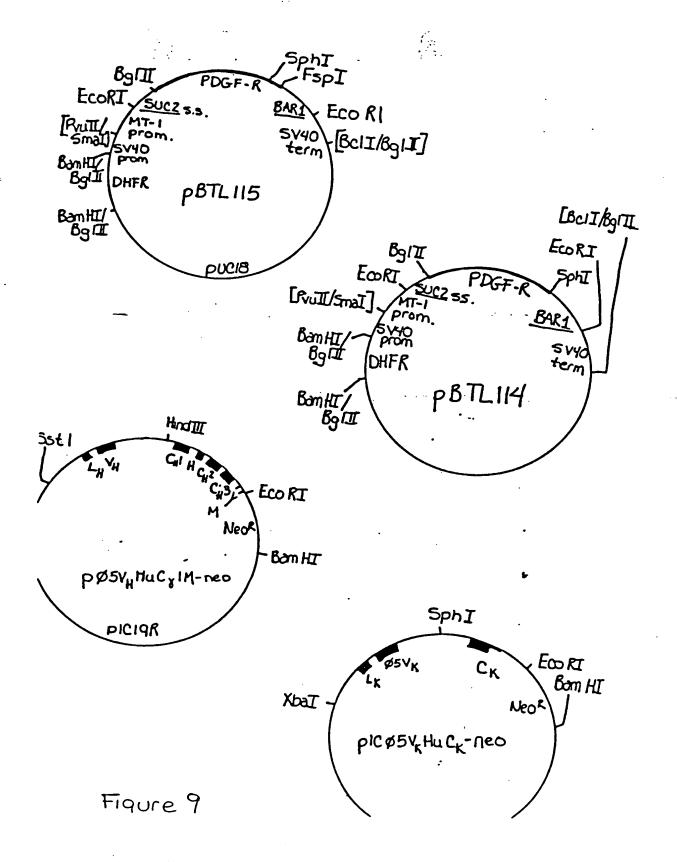
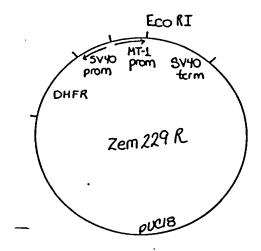
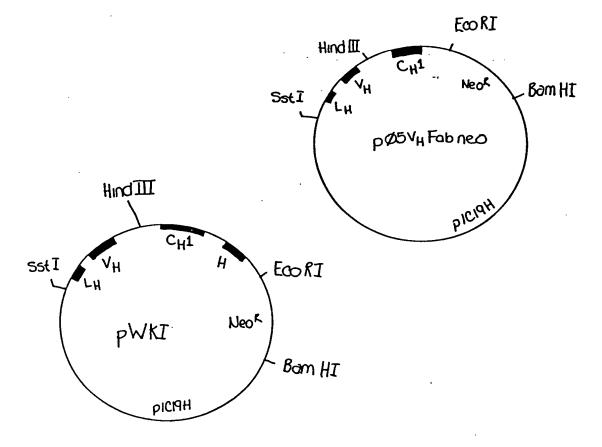


Figure 10

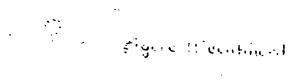




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- 2830 AGTGATGTCTGGTCTTATGGCATTCTGCTGGGAGATCTTTTCCCTTGGTGGCACCCCTTACCCCGGC S D V W S Y G I L L W Z I F S L G G T P Y P G
- 2899 ATGATGGTGGATTCTACTTTCTACAATAAGATCAAGAGTGGGTACCGGATGGCCAAGCCTGACCACGCT H H V D S T F Y N K I K S G Y R H A K P D H A
- 2968 ACCAGTGAAGTCTACGAGATCATGGTGAAATGCTGGAACAGTGAGCCGGAGAAGAGAGCCCTCCTTTTAC T S E V Y E I N V K C W N S E P E K R P S F Y
- 3037 CACCTGAGTGAGATTGTGGAGAATCTGCTGCCTGGACAATATAAAAAGAGTTATGAAAAAATTCACCTG HLSEIVENLLPGQYKKSYEKIHL
- 3106 GACTTCCTGAAGAGTGACCATCCTGCTGTGGCACGCATGCGTGTGGACTCAGACAATGCATACATTGGT D F L K S D H P A V A R H R V D S D N A Y I G
- 3175 GTCACCTACAAAACGAGGAAGACAAGCTGAAGGACTGGGAGGGTGGTCTGGATGAGCAGAGACTGAGC TYKNEEDKLKDWEGGLDEQRLS
- 3244 GCTGACAGTGGCTACATCATTCCTCTGCCTGACATTGACCCTGTCCCTGAGGAGGAGGACCTGGGCAAG ADSGYIIPLPDIDPVPEEEDLGK
- 3313 AGGAACAGACAGCTCGCAGACCTCTGAAGAGAGTGCCATTGAGACGGGTTCCAGCAGTTCCACCTTC RNRHSSQTSEESAIETGSSSSTF
- 3382 ATCAAGAGAGAGGACGAGACCATTGAAGACATCGACATGATGACGACATCGGCATAGACTCTTCAGAC I K R E D E T I E D I D H H D D I G I D S S D
- L V E D S P L 1089
- 3520 ATCCCGTTCAGAAAACCACTTTATTGCAATGCGGAGGTTGAGAGGAGGACTTGGTTGATGTTTAAAGAG
- 3727 AGGGAATAATAGGCCACAGAAGGTGAACTTTGTGCTTCAAGGACATTGGTGAGAGTCCAACAGACACAA

- 3934 ATGTAGCTGCTGTTGAACTTTTTAAAGAAGTGCATGAAAAACCATTTTTGAACCTTAAAAGGTACTGGT
- 4003 ACTATAGCATTTTGCTATCTTTTTTAGTGTTAAAGAGATAAAGAATAATAAG

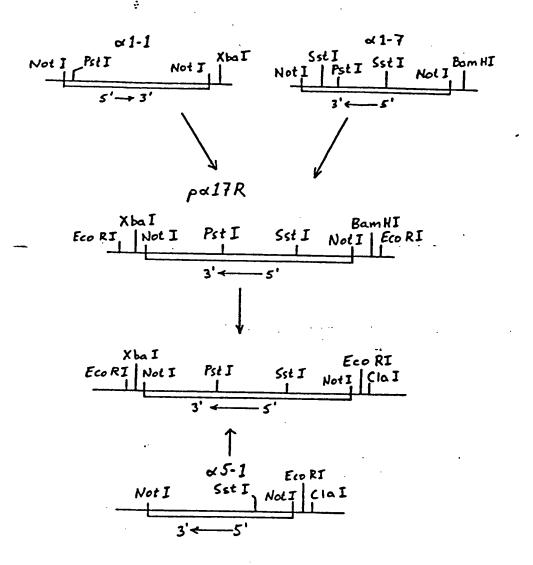


FIGURE 12

1	GGC	CCI	CAG	ccc	TGC	TGC	CCA	GC	\CG1	\GC(	CTGI	'GCT	CGC	CCI	rgcc	CAA	CGC	AGA	CAG	CCY	GAC	CCA	GG	69
70	GCGG	ccc	CTC	TGG	CGG	CTC	TGC	TCC	CTC	CGA	<b>LAG</b> G	ATG	CTT	GGG	GλG	TGA	GGC	Gλλ	GCT	GGG	CGC	TCC	TC	138
139	TCC	CTA	CAG	CAG	ccc	CCI	TCC	TCC	CATO	CCT	rctg	TTC	TCC	TGA	\GCC	TTC	AGG	AGC	CTG	CAC	CAG	TCC	TG	207
208	ССТС	TCC	TTC	TAC	TCA	GCT	'GTT	ACC	CAC	TCI	rggg	ACC	λGC	AGI	CTI	тст	GAT	AAC	TGG	GAG	AGG	GCA	GT	276
277	AAGO	AGG	ACT	TCC	TGG	λGG	GGG	TG	CTC	TCC	CAGA	GCC	TGG	AAC	TGI	GCC	CAC	ACC	λGA	AGC	CAT	CAG	CA	345
346	GCA	.GGX	CAC																					414
				H	R	L	₽	·G	λ	M	P	λ	L	λ	L	K	G	E.	L	L	L	L	S	20
415	CTCT				_																			483
	L	L	L	L	L	E	P	Q	I	8	Q	G	L	V	V	T	P	P	G	P	E	L	V	43
484	TCCT	CAA	TGT	CIC	CAG	CAC	CTT	CGT	TCI	'GAC	CTG	CTC	GGG	TTC	AGC	TCC	GGT	GGT	GTG	GGA	YCC	GAT	GT	552
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691	AGCG	GΑλ	ACG	GCT	СТА	CAT	CTT	TGI	'GCC	:AGA	TCC	CAC	CGT	GGG	CTT	CCT	ccc	TAA	TGA	TGC	:CGA	GGλ	λC	759
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	R TATI	K Cat	r Ctt	L TCT	Y CAC	I :GGA	P Aat	۷ کمر	P TGA	D GAD	P	T CAT	V TCC	G ATG	P	AGT	λλο	λGλ	ccc	ACA	GCI	ggt	GG	
760	R TATT P TGAC	K Cat I Act	R CTT F GCA	L TCT L CGA	Y CAC T	I GGA E	P AAT I AGG	V AAC T GGA	P TGA E CGT	D GAT I TGC	P CAC T CACT	T CAT I GCC	V TCC P TGT	G ATG C	P CCG R	AGT V	AAC T	AGA D	.CCC P ACG	ACA Q	GCT L	GGT V	GG V TG	828 158 897
760	R TATT P TGAC	K Cat I Act	R CTT F GCA	L TCT L CGA	Y CAC T	I GGA E	P AAT I AGG	V AAC T GGA	P TGA E CGT	D GAT I TGC	P CAC T	T CAT I GCC	V TCC P TGT	G ATG C	P CCG R	AGT V	AAC T	AGA D	.CCC P ACG	ACA Q	GCT L	GGT V	GG V TG	828 158
760 829	R TATT P TGAC	K CAT I ACT L	R CTT F GCA H	L TCT L CGA	Y CAC T GAA K	I GGA E GAA K	P AAT I AGG G	V AAC T GGA D	P TGA E CGI V	D GAT I TGC	P T T CACT	T CAT I GCC P	TCC P TGT V	G ATG C C C C P	P CCG R CTA Y	AGT V TGA D	AAC T TCA H	AGA D CCA Q	CCC P ACG R	ACA Q TGG	GCT L CTT	GGT V TTC S	GG V TG G	828 158 897
760 829	TATT P TGAC T	K CAT I ACT L	R CTT F GCA H TGA	L TCT L CGA B	Y CAC T GAA K	GGA E GAA K	P AAT I AGG G CTA	V AAC T GGA D	P TGA E CGI V	D GAT I TGC A	P T T CACT	CAT I GCC P CAC	V TCC P TGT V	G ATG C C C C P	P CCTA Y	AGT V TGA D	TCA H	AGA D .CCA Q .GGT	ACG R	ACA Q TGG G	GCT L SCTT F	GGT V TTC S	GG V TG G	828 158 897 181
760 829 898	TATT P TGAC T	K CAT I CACT L CTT	R CTT F GCA H TGA E	L TCT L CGA B GGA	CAC T GAA K CAG	GGA E GAA K AAG	AAT I AGG G CTA	V AAC T GGA D CAT	P TGA E CGI V	D GAT I TGC A K	P T CACT L L	CAT I GCC P CAC	TCC P TGT V CAT	G ATG C C C C P TGG	P CCG R CCTA Y GGGA D	TGA D CAG	TCA H GGA	CCA Q GGT	ACG R GGA	TGG G	GCT L GCTT F TGA	TTC S TGC	GG V TG G CT Y	828 158 897 181 966 204
760 829 898	R TATT P TGAC T GTAT I	K CAT I ACT L CTT F	R CTT F GCA H TGA E	L TCT L CGA B GGA D CAG	CAC T GAA K CAG R	GGA E GAA K AAG 8	AAT AGG G CTA Y GGT	AAC T GGA D CAT GTC	P TGA E CGT V	D GAT TGC A K CAT	P T CACT L L	CAT I GCC P CAC T CGT	TCC P TGT V CAT	G ATG C C C C C C C C C C C C C C C C C C C	F CCTA Y GGGA	TGA D CAG R	TCA H GGA B	AGA D CCA Q GGT V	ACG R GGA D	ACA Q TGG G TTGG	GCT L CTT F CTGA D	TTC S TGC A	GG V TG G CT Y	828 158 897 181 966 204
760 829 898	R TATT P TGAC T GTAT I ACTA Y	K CAT I CACT L CTT F TGT V	R CTT F GCA H TGA TGA CTA Y	L TCT L CGA B GGA D CAG R	CAC TACAC GAA K CAG R ACT L	GGAAK AAG S	AAT AGG G CTA GGT V CAT	V AAC T GGA D CAT GTC S GTG	P TGA E CGT C C C	D GAT TGC A CAA K CAT	P TCAC TCAA TCAA N	CAT I GCC P CAC T CGT V CGG	TCC P TGT V CAT I CTC S	G ATG CCC P TGG TGI V	F GCCG R CCTA Y GGGA D CGAA N	TGA D CAG R CGC	TCA H GGA E AGT V	CCA Q GGT V GCA Q	ACGA CGA	TGT V	GCT L SCTT F CTGA CTGA CTGA CGAC	TTC S TGC A CCG R	GG V TG G CT Y CC Q	828 158 897 181 966 204 1035 227
760 829 898 967	R TATT P TGAC T GTAT I ACTA Y	K CAT I CACT L CTT F TGT V	R CTT F GCA H TGA TGA CTA Y	L TCT L CGA B GGA D CAG R	CAC TACAC GAA K CAG R ACT L	GGAAK AAG S	AAT AGG G CTA GGT V CAT	V AAC T GGA D CAT GTC S GTG	P TGA E CGT C C C	D GAT TGC A CAA K CAT	P TCAC TCAA TCAA N	CAT I GCC P CAC T CGT V CGG	TCC P TGT V CAT I CTC S	G ATG CCC P TGG TGI V	F GCCG R CCTA Y GGGA D CGAA N	TGA D CAG R CGC	TCA H GGA E AGT V	CCA Q GGT V GCA Q	ACGA CGA	TGT V	GCT L SCTT F CTGA CTGA CTGA CGAC	TTC S TGC A CCG R	GG V TG G CT Y CC Q	828 158 897 181 966 204 1035 227
760 829 898 967	TATT F TGAC T GTAT I ACTA Y AGGG	K CAT I ACT L CTT F TGT V	R CTT F GCA H TGA E CTA Y GAA H	L TCT L CGA B GGA CAG R CAT	CAC R CAC R ACT L	GGA E GAA K AAG CCA Q	P AAT I AGG G CTA Y GGT V CAT	V AAC T GGA D CAT GTC S GTC C	P TGA CGT C C CATC S CATC	D GAT TGC A CAT CAT TGT	P CACT L L LAAC T CAA N CGAT I	CAT CGT V	V TCC P TGT V CAT I CTC S GAA	G CCC P TGG G TGG V TGA	F GCCG R CCTA Y GGGA D CGAA N	TGA D CAG R CGC A	TCA H GGA B AGT V	GGT Q	ACGA CGA	TGG TGG TTGG TTGG TGG TGG	GCT L SCTT F TGA TGGT V	GGT V TTC S TGC A CCG R	TG G CT Y CC Q CC P	828 158 897 181 966 204 1035 227 1104 250
760 829 898 967	TATT F TGAC T GTAT I ACTA Y AGGG G CCCG	K CAT I CAT F TGT V TGA E CAA	R CTT P GCA H TGA E CTA Y GAA N AGA	L TCT L CGA B GGA D CAG R CAT I	Y CAC T GAA K CAG R ACT L CAC T	I GGAA K AAG 8 CCA Q CCT L	P AAT I AGG G CTA Y GGT V CAT H GCT	V AAC T GGA D CAT I GTC S GTG C	P TTGM E CGT V TCTG C CATC	D GGAT I TTGC A GCAT I TTGT V	P CACT L L LAAC T CAA N CGAT I	CAT CAC P CAC T CGT V CGG GAC	V TCC P TGT V CAT I CTC S GAA N	G CCC P TGG G TGG V TGA	F GCCG R CCTA Y GGGA D CGAA N UCGT	TGA D CAG R CGC A	TCA TGGA BGGA VCAA NGGA	GCA Q CTT	ACGA CGA	TGT O TTA	GGT CGAC	TTC S TGC A CCG R	GG V TG G CT Y CC Q CC P	828 158 897 181 966 204 1035 227 1104 250
760 829 898 967	R TATT P TGAC T GTAT I ACTA Y AGGG G CCCG R	K CAT L CAT F TGT V TGA E CAA K CAT	R CTT F GCA H TGA E CTA Y GAA N AGA E CCT	L TCT L CGA B GGA C CAG R CAT I AAG S GCA	Y CAC T GAA K CAG R ACT L CAC T TGG G CAT	I GGA K AAG 8 CCCA Q CCCT L GCG R CCCC	P AAT I AGG G CTA Y GGT V CAT H GCT L	V AAC T GGA D CAT I GTC S GTG C C TTGC	P TTGA E CGT C CATC S CATC I TGGGA E	D GAT TGC A CCAT I TGT V .GCC P	P TCAC T L LAAC T TCAA N TGAT I CGGT V	CAT I GCC P CAC T CGT V CGG G GAC T AGA	V TCC P TGT V CAT I CTC S GAA N TGA D CTC	G CCC P TGG G V TGA E CTT P GGG	FGCG R GGGA D GGGT V CCCT L GGAC	AGT V CAGC A CGC A CGT V CTT	TCA TCA TCA TCA TCA TCA TCA TCA TCA TCA	AGA D CCA Q GGT V GCA Q CTT F	ACGA R GGAC T CGA	TTGT V GTG	GCTT P TTGA  CTGA  CTGA	GGT V TTC S TGC A CCG R ATA Y CAT I	TG G CC P CC R	828 158 897 181 966 204 1035 227 1104 250 1173 273
760 829 898 967 1036	R TATT P TGAC T GTAT I ACTA Y AGGG G CCCG R	K CAT L CAT F TGT V TGA E CAA K CAT	R CTT F GCA H TGA E CTA Y GAA N AGA E CCT	L TCT L CGA B GGA C CAG R CAT I AAG S GCA	Y CAC T GAA K CAG R ACT L CAC T TGG G CAT	I GGA K AAG 8 CCCA Q CCCT L GCG R CCCC	P AAT I AGG G CTA Y GGT V CAT H GCT L	V AAC T GGA D CAT I GTC S GTG C C TTGC	P TTGA E CGT C CATC S CATC I TGGGA E	D GAT TGC A CCAT I TGT V .GCC P	PCACT LAACCT CAAA NCGAT I CGGT V	CAT I GCC P CAC T CGT V CGG G GAC T AGA	V TCC P TGT V CAT I CTC S GAA N TGA D CTC	G CCC P TGG G V TGA E CTT P GGG	FGCG R GGGA D GGGT V CCCT L GGAC	AGT V CAGC A CGC A CGT V CTT	TCA TCA TCA TCA TCA TCA TCA TCA TCA TCA	AGA D CCA Q GGT V GCA Q CTT F	ACGA R GGAC T CGA	TTGT V GTG	GCTT P TTGA  CTGA  CTGA	GGT V TTC S TGC A CCG R ATA Y CAT I	TG G CC P CC R	828 158 897 181 966 204 1035 227 1104 250 1173 273
760 829 898 967 1036 1105 1174	TATT P TGAC T GTAT I ACTA Y AGGG G CCCG R GCTC	K CAT L CTT F TGT V TGA K CAT I GAA	R CTT F GCA H TGA CTA Y GAA N AGA E CCT TGA	L TCT L CGA B GGA D CAG R CAT I AAG GCA H CCA	GAAR CAGE R ACT TGG G CAT TCA	GAAAG AAG CCA CCT L GCG R CCCC P GGA	PAATI AGG G CTA Y GGT N CAT H CAG TGA	V AAC GGA D CAT I GTC S GTG C TGC AAAA	PATE CONTROL OF CONTRO	D GAN TGC A CAN TGT V GCC P GTT L CAN	PCACT CAACT CAACT CGGT VCGGT CGGT CGGAC	T CAT I GCC P CAC T CGT V CGG G AC T AGA C CAT	V TCC P TGT V CAT I CTC S GAA' D CTC S CAC	G CCC P TGG G CTT P GGG G CGT	F GCCG R GCTA Y GGGA D CGAA N CCCT L GGAC T	TGA CAGC A CGC A CGTT L CTA TGA	TCA TCA H GGA B CAA N GGA CAC TGAG	AGA D CCA Q GGT V GCA Q CTT F TAT M	ACGA P CGA P CAA N CTA	TTA  GTG  GTG  GTG  GTG  TTA  TTA  Y  CGT  CGTG  CGTG	GCTT P TGA C T C C A C C A C C A C C A C C A C C A C C A C C A C C A C C A C C A C C C A C C C A C C C A C C C A C C C A C	GGT V TTC S TGC A CCG R ATA Y CAT GGA E GCT	GG V TG G CT Y CC Q CC P CC R GA S	828 158 897 181 966 204 1035 227 1104 250 1173 273 1242 296

Fig. 1A

1312 TGGGAGAGGTGGGCACACTACAATTTGCTGAGCTGCATCGGAGCCGGACACTGCAGGTAGTGTTCGAGG 1380 GEVGTLQFAELHRSRTLQVVFEA342 1381 CCTACCCACCGCCCACTGTCCTGTGGTTCAAAGACAACCGCACCCTGGGCGACTCCAGCGCTGGCGAAA 1449 Y P P T V L W F K D N R T L G D S S A G E I 365 1450 TCGCCCTGTCCACGCGCAACGTGTCGGAGACCCGGTATGTGTCAGAGCTGACACTGGTTCGCGTGAAGG 1518 ALSTRNVSETRYVSELTLVRVKV 388 1519 TGGCAGAGGCTGGCCACTACACCATGCGGGCCTTCCATGAGGATGCTGAGGTCCAGCTCTCCTTCCAGC 1587 AEAGHYTM'RAPHEDAEVQLSPQL411 QINVPVRVLELSESHPDSGEQTV 434 RCRGRGMPQPNIIWSACRDLKRC 457 1726 GTCCACGTGAGCTGCCGCCCACGCTGCTGGGGAACAGTTCCGAAGAGGAGAGCCAGCTGGAGACTAACG 1794 PRELPPTLLGNSSEEBSQLETNV 480 1795 TGACGTACTGGGAGGAGGAGCAGGAGTTTGAGGTGGTGAGCACACTGCGTCTGCAGCACGTGGATCGGC 1863 TYWEERQEPEVVSTLRLQHVDRP503 1864 CACTGTCGGTGCGCTGCGCCAACGCTGTGGGCCAGGACACGCAGGAGGTCATCGTGGTGCCAC 1932 LSVRCTLRNAVGQDTQEVIVVPH 526 1933 ACTCCTTGCCCTTTAAGGTGGTGATCTCAGCCATCCTGGCCCTGGTGGTGCTCACCATCATCTCCC 2001 SLPFKVVVISAILALVVLTIISL 549 2002 TTATCATCCTCATCATGCTTTGGCAGAAGAAGCCACGTTACGAGATCCGATGGAAGGTGATTGAGTCTG 2070 IILIHLWQKKPRYEIRWKVIESV 572 2071 TGAGCTCTGACGGCCATGAGTACATCTACGTGGACCCCATGCAGCTGCCCTATGACTCCACGTGGGAGC 2139 88DGHEYIYVDPHQLPYD8TWEL595 2140 TGCCGCGGGACCAGCTTGTGCTGGGACGCACCCTCGGCTCTGGGGCCTTTGGGCAGGTGGTGGAGGCCA 2208 PRDQLVLGRTLGSGAFGQVVEAT 618 2209 CGGCTCATGGCCTGAGCCATTCTCAGGCCACGATGAAAGTGGCCGTCAAGATGCTTAAATCCACAGCCC 2277 AHGLSHSQATMKVAVKMLKSTAR 641 2278 GCAGCAGTGAGAAGCCATTATGTCGGAGCTGAAGATCATGAGTCACCTTGGGCCCCACCTGAACG 2346 SSEKQALMSELKIMSHLGPHLNV 664 2347 TGGTCAACCTGTTGGGGGCCTGCACCAAAGGAGGACCCATCTATATCATCACTGAGTACTGCCGCTACG 2415 VNLLGACTKGGPIYIITEYCRYG 687 2416 GAGACCTGGTGGACTACCTGCACCGCAACAAACACACCTTCCTGCAGCACCACTCCGACAAGCGCCGCC 2484 DLVDYLHRNKHTPLQHHSDKRRP710 2485 CGCCCAGCGGGGGCTCTACAGCAATGCTCTGCCCGTTGGGCTCCCCCTGCCCAGCCATGTGTCCTTGA 2553 PSAELYSNALPVGLPLPSHVSLT 733

2554 CCGGGGAGAGCGACGGTGCTACATGACATGAGCAAGGACGAGTCGGTGGACTATGTGCCCATGCTGG 2622 GESDGGYMDHSKDESVDYVPHLD756 2623 ACATGAAAGGAGACGTCAAATATGCAGACATCGAGTCCTCCAACTACATGGCCCCTTACGATAACTACG 2691 MKGDVKYADIESSNYMAPYDNYV 779 2692 TTCCCTCTGCCCTGAGAGGACCTGCCGAGCAACTTTGATCAACGAGTCTCCAGTGCTAAGCTACATGG 2760 PSAPERTCRATLINESPVLSYMD 802 2761 ACCTCGTGGGCTTCAGCTACCAGGTGGCCAATGGCATTGGAGTTTCTGGCCTCCAAGAACTGCGTCCACA 2829 LVGFSYQVANGMBPLASKNCVHR 825 2830 GAGACCTGGCGGCTAGGAACGTGCTCATCTGTGAAGGCAAGCTGGTCAAGATCTGTGACTTTGGCCTGG 2898 DLAARNVLICEGKLVKICDFGLA 848 2899 CTCGAGACATCATGCGGGACTCGAATTACATCTCCAAAGGCAGCACCTTTTTGCCTTTAAAGTGGATGG 2967 RDIMRDSNYISKGSTPLPLKWMA 871 2968 CTCCGGAGAGCATCTTCAACAGCCTCTACACCACCCTGAGCGACGTGTGGTCCTTCGGGATCCTGCTCT 3036 PESIFNSLYTTLSDVWSFGILLW 894 3037 GGGAGATCTTCACCTTGGGTGGCACCCCTTACCCAGAGCTGCCCATGAACGAGCAGTTCTACAATGCCA 3105 EIFTLGGTPYPELPHNEQFYNAI 917 3106 TCAAACGGGGTTACCGCATGGCCCAGCCTGCCCATGCCTCCGACGAGATCTATGAGATCATGCAGAAGT 3174 KRGYRNAQPAHASDEIYEIMQKC 940 3175 GCTGGGAAGAGATTTGAGATTCGGCCCCCCTTCTCCCAGCTGGTGCTGCTTCTCGAGAGACTGTTGG 3243 WEEKPEIRPPPSQLVLLERLLG 963 3244 GCGAAGGTTACAAAAAGAAGTACCAGCAGGTGGATGAGGAGTTTCTGAGGAGTGACCACCCAGCCATCC 3312 EGYKKYQQVDEFLRSDHPAI L 986 3313 TTCGGTCCCAGGCCCGCTTGCCTGGGTTCCATGGCCTCCGATCTCCCCTGGACACCAGCTCCGTCCTCT 3381 RSQARLPGFHGLRSPLDTSSVLY1009 TAVQPNEGDNDYIIPLPDPKPEV1032 ADEGPLEGSPSLASSTLNEVNTS1055 3520 CCTCAACCATCTCCTGTGACAGCCCCCTGGAGCCCCAGGACGAACCAGAGCCAGAGCCCAGCTTGAGC 3588 STISCDSPLEPQDEPEPQLEL1078 3589 TCCAGGTGGAGCCGGAGCCAGAGCTGGAACAGTTGCCGGATTCGGGGTGCCCTGCGCCTCGGGCGGAAG 3657 QVEPELEQLPDSGCPAPRAEA1101 EDSPL. 3727 CCAGCATCTCCTGGCCTGGCCTGACCGGGCTTCCTGTCAGCCAGGCTGCCCTTATCAGCTGTCCCCTTC 3795

3865 AGGGGCCGTGACCAGCCTCTGCCTCCAGGGAGGCCAACTGACTCTGAGCCAGGGTTCCCCCAGGGAAC 3933 3934 TCAGTTTTCCCATATGTAAGATGGGAAAGTTAGGCTTGATGACCCAGAATCTAGGATTCTCTCCCTGGC 4002 4003 TGACACGGTGGGGAGACCGAATCCCTCCCTGGGAAGATTCTTGGAGTTACTGAGGTGGTAAATTAACAT 4071 4072 TTTTTCTGTTCAGCCAGCTACCCCTCAAGGAATCATAGCTCTCTCCTCGCACTTTTTATCCACCCAGGA 4140 4141 GCTAGGGAAGAGACCCTAGCCTCCCTGGCTGCTGGCTGAGCTAGGCCTAGCTTGAGCAGTGTTGCCTC 4209 4210 ATCCAGAAGAAAGCCAGTCTCCTCCCTATGATGCCAGTCCCTGCGTTCCCTGGCCCGAGCTGGTCTGGG 4278 4279 GCCATTAGGCAGCCTAATTAATGCTGGAGGCTGAGCCAAGTACAGGACACCCCCAGCCTGCAGCCCTTG 4347 4348 CCCAGGGCACTTGGAGCACACGCAGCCATAGCAAGTGCCTGTGTCCCTGTCCTTCAGGCCCATCAGTCC 4416 4417 TGGGGCTTTTTCTTTATCACCCTCAGTCTTAATCCATCACCAGAGTCTAGAAGGCCAGACGGGCCCCG 4485 4555 CTCTGCATTGGACCTGCTATGAGGCTTTGGAGGAATCCCTCACCCTCTCTGGGCCTCAGTTTCCCCTTC 4623 4624 AAAAAATGAATAAGTCGGACTTATTAACTCTGAGTGCCTTGCCAGCACTAACATTCTAGAGTATTCCAG 4692 4693 GTGGTGCACATTTGTCCAGATGAAGCAAGGCCTATACCCTAAACTTCATCCTGGGGGTCAGCTGGGCTC 4761 4762 CTGGGAGATTCCAGATCACACTCTGGGGACTCAGGAACCATGCCCCTTCCCCAGGCCCCCAG 4830 4831 CAAGTCTCAAGAACACAGCTGCACAGGCCTTGACTTAGAGTGACAGCCGGTGTCCTGGAAAGCCCCAAG 4899 4900 CAGCTGCCCCAGGGACATGGGAAGACCACGGGACCTCTTTCACTACCCACGATGACCTCCGGGGGTATC 4968 4969 CTGGGCAAAAGGGACAAAGAGGGCAAATGAGATCACCTCCTGCAGCCCACCACTCCAGCACCTGTGCCG 5037 5038 AGGTCTGCGTCGAAGACAGAATGGACAGTGAGGACAGTTATGTCTTGTAAAAGACAAGAAGCTTCAGAT 5106 5107 GGTACCCCAAGAAGGATGTGAGAGGTGGCTGCTTTGGAGTTTGCCCCCTCACCCCACCAGCTGCCCCAT 5175 5176 CCCTGAGGCATGCGCTCCATGGGGGTATGGTTTTGTCACTGCCCAGACCTAGCAGTGACATCTCATTGT 5244 5245 CCCCAGCCCAGTGGGCATTGGAGGTGCCAGGGGAGTCAGGGTTGTAGCCAAGACGCCCCGCACGGGGA 5313 5314 GGGTTGGGAAGGGGTGCAGGAAGCTCAACCCCTCTGGGCACCAACCCTGCATTGCAGGTTGGCACCTT 5382 5383 ACTTCCCTGGGATCCCCAGAGTTGGTCCAAGGAGGGAGAGTGGGTTCTCAATACGGTACCAAAGATATA 5451 5452 ATCACCTAGGTTTACAAATATTTTTAGGACTCACGTTAACTCACATTTATACAGCAGAAATGCTATTTT 5520 5521 GTATGCTGTTAAGTTTTTCTATCTGTGTACTTTTTTTTAAGGGAAAGATTTT 5572

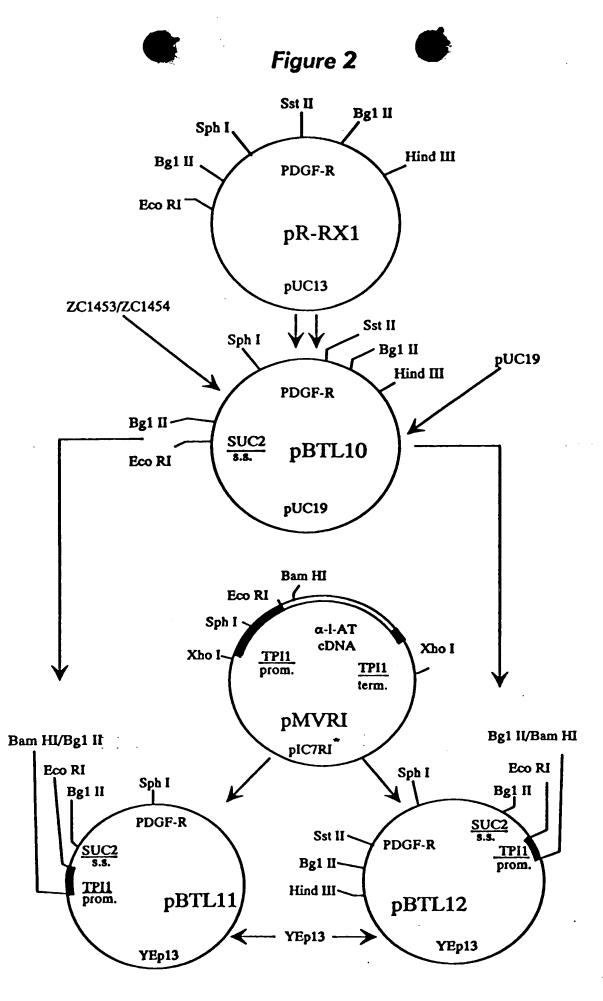


Figure 3

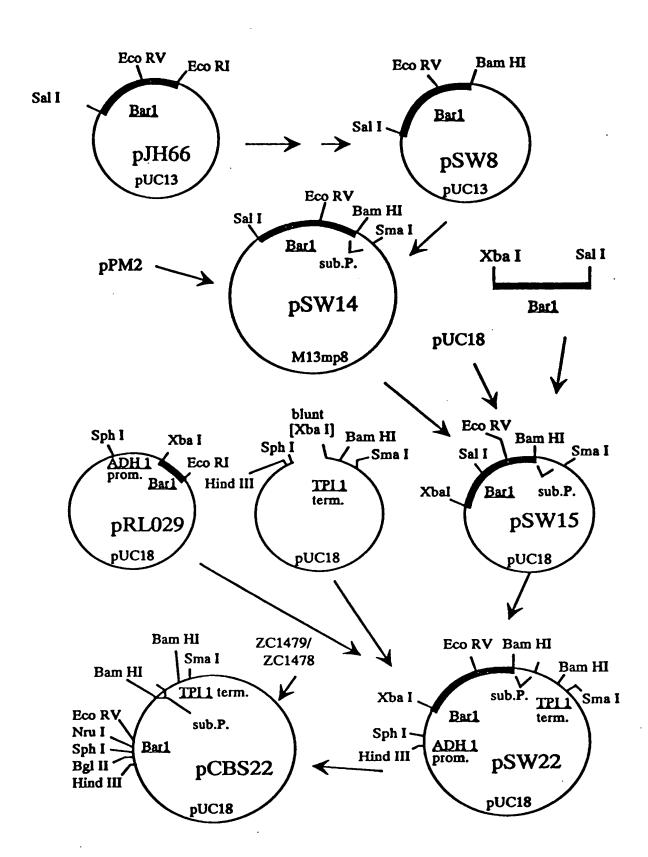


Figure 4

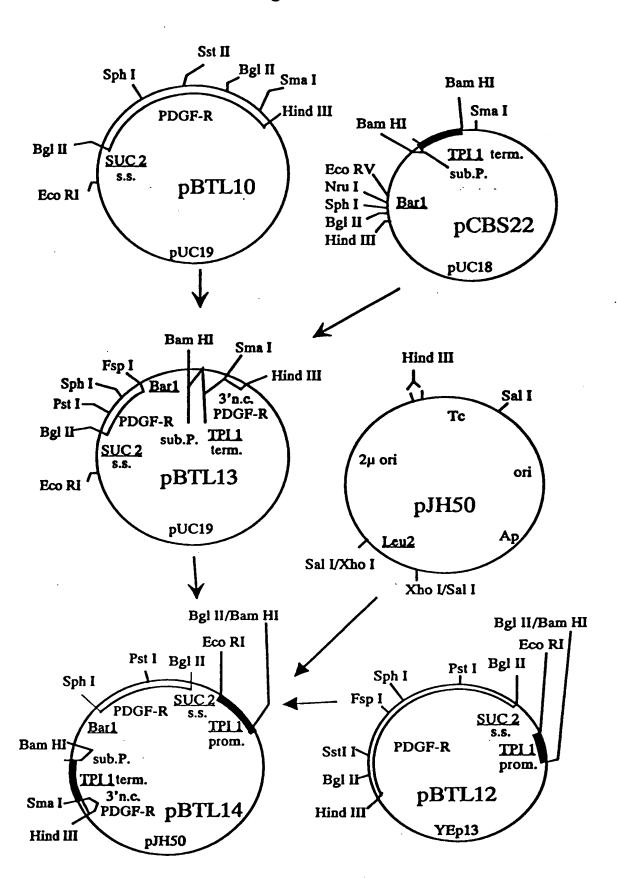


Figure 5

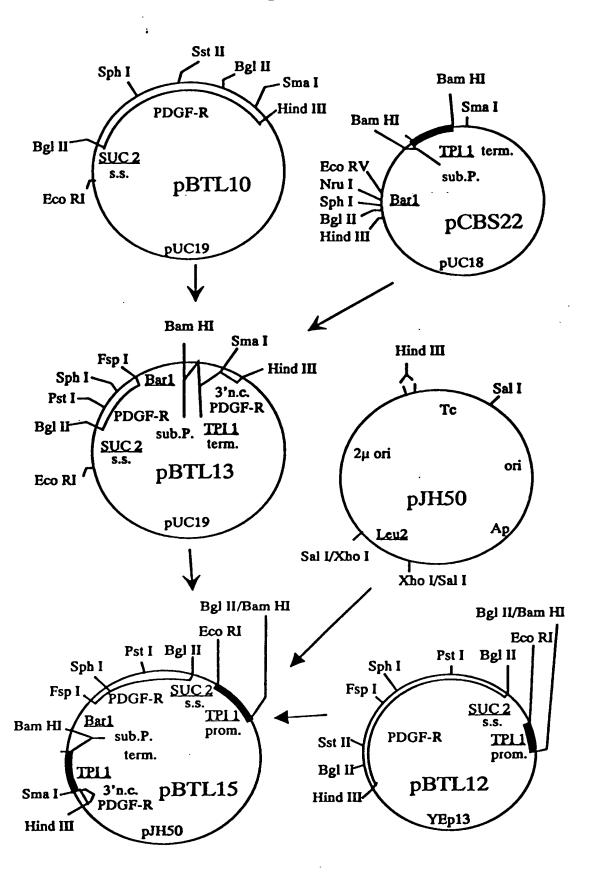


Figure 6

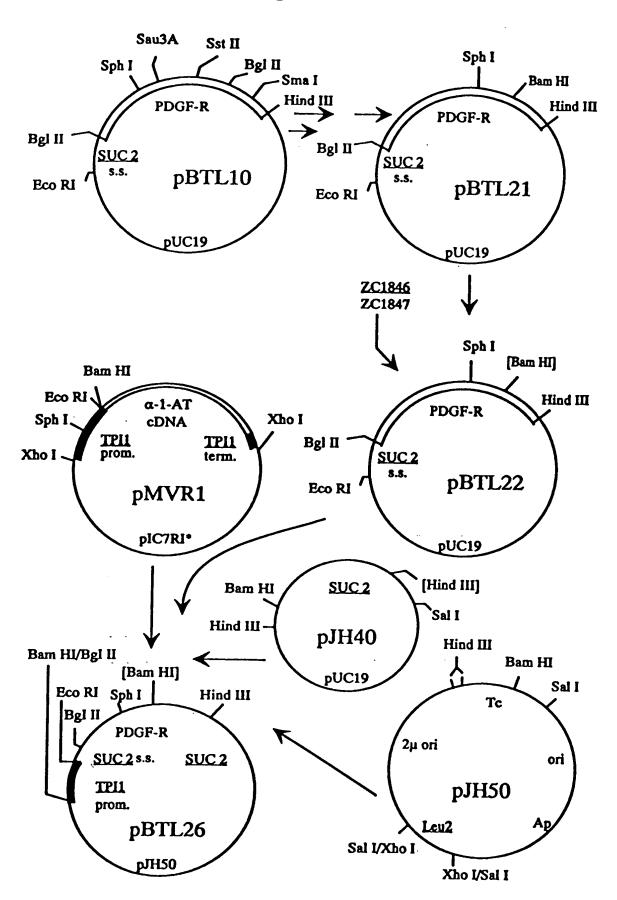


Figure 7

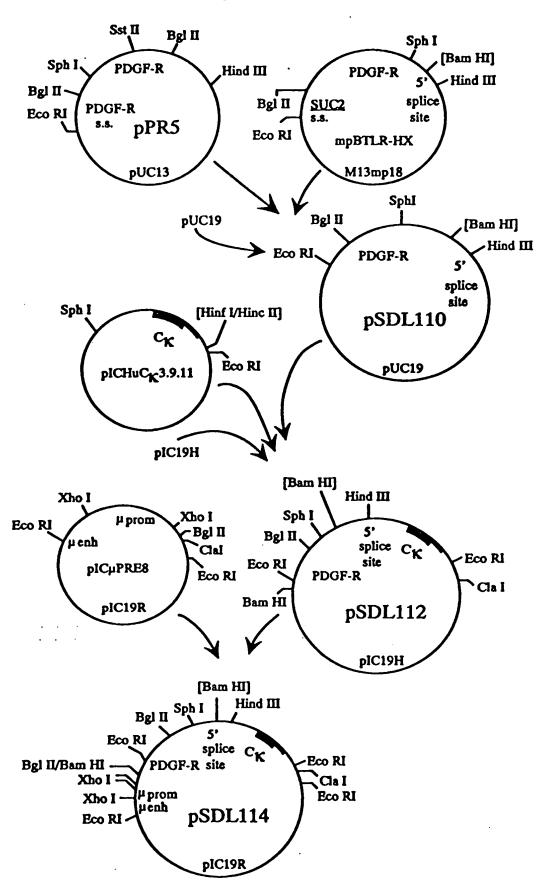


Figure 8

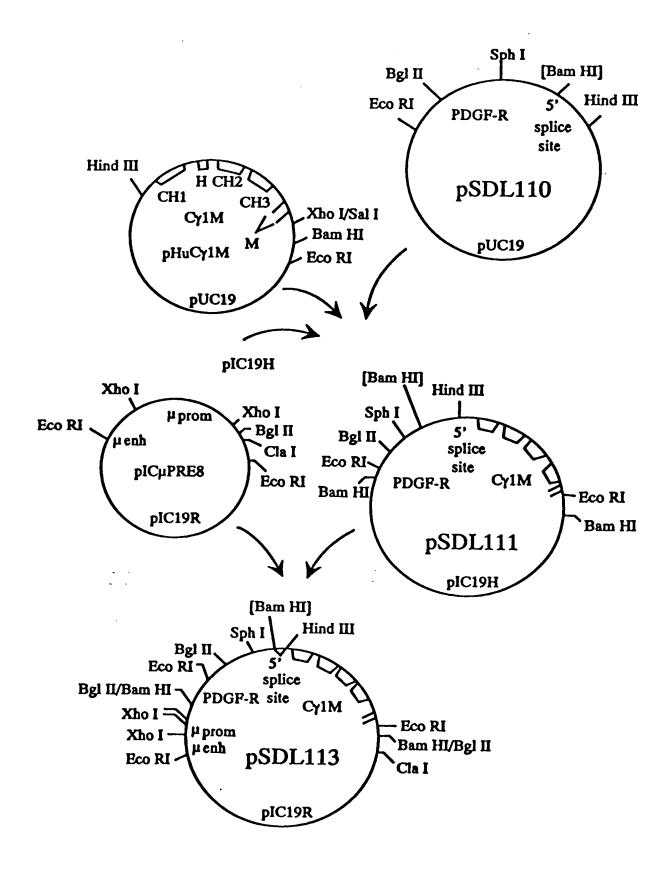


Figure 9

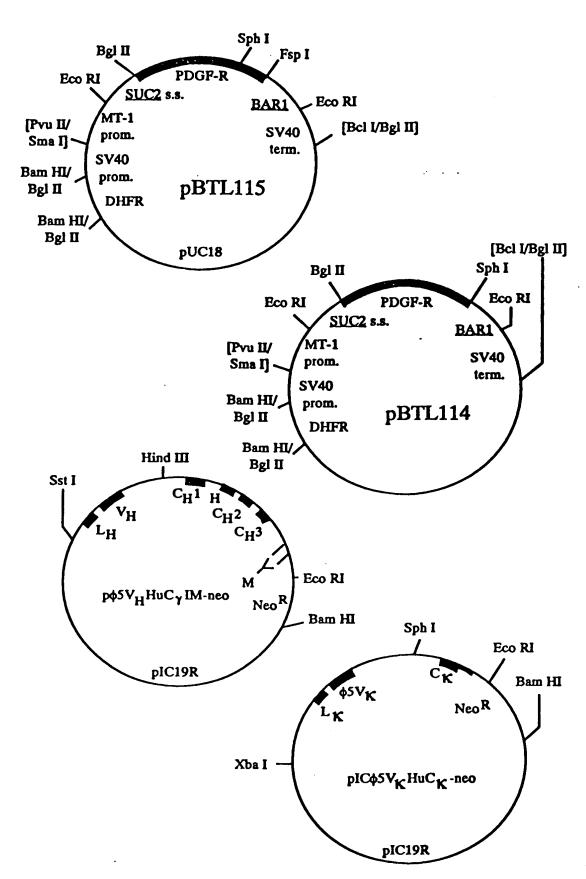
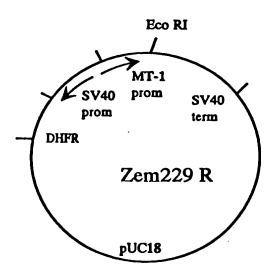
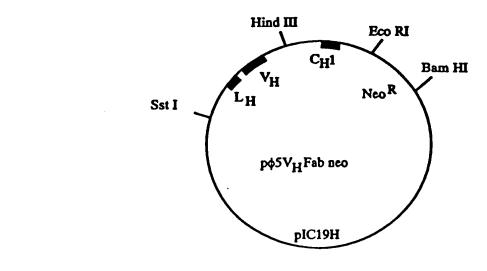
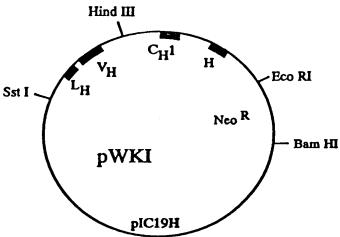


Figure 10







### Figure 11A

1																							GCCT
70	TC	CTG	CAG	SACC	CAC	AGG	GAA	GTA	CTC	CCT	TTG	ACC	TCC	GGG	iGA0	CTG	icg/	(CCA	GGT	TAT	ACG	TTG	CTGG
139	TG	iga4	VAAG	STG/	(CAA	TTC	TAG	GAA	AAG	AGC	TAA	AAG	CCG	GAT	CGG	STG/	\CC0		GTT	TCC	CAG	AGC	TATG M 1
208		GAC T																	CCT L				CCAG Q
277	_			ACC P							AAA N								TTC S				TCTG L
346				TGG G												-	-						GGAA E
415	AT I	CAG R		TGA E	AGA E	AAA N	CAA N	CAG S											CAG S				GGCC A
484				GTT L																			GCAC H
553			-	CTA Y				CCC P											GGA D				CATC I
622	GT( V			TGA D		TTC S			TAT I	ACC P			CAC T		TGA D	TCC P		GAC T	TCC P	TGT. V		CTT. L	ACAC H
691				GGG G															GAC T				aggg G
760				CTG C																		TGC A	TTTA L
B2 <b>9</b>				ATC/ S																			GATT I
398				CTG <sup>*</sup>				TAA( <b>N</b>											CCC <sup>-</sup>				gaaa K

## Figure 11B

967																				CAC	Щ	GAC	CGGTC
	G	K	G	1	1	1	L	£	t	I	K	V	P	S	I	K	L	٧	Y	ł	L	I	V
1036																						GGT	CAAA
	P	Ε	Α	T	٧	K	D	S	G	D	Y	Ε	С	Α	Α	R	Q	Α	T	R	Ε	٧	K
1105																			<b>VACC</b>	CAC	стт	CAG	CCAG
	Ε	M	K	K	V	T	I	S	٧	Н	Ε	K	G	F	I	Ε	I	K	P	T	F	S	Q
1174	П	GGA	AGC	TGT	CAA	CCT	<b>GCA</b>	TG/	VAGT													TCC	CAGG
	L	Ε	A	٧	N	L	Н	Ε	V	K	Н	F	٧	٧	Ε	٧	R	A	Y	P	P	P	R
1243	AT	ATC	CTG	GCT	GAA	<b>AA</b>															TGT	GGA	AAAG
	I	S	W	L	K	N	N	L	T	L	I	Ε	N	L	T	Ε	I	T	T	D	٧	E	K
1312	ΑT	TCA	GGA	AAT	AAG	GTA	TCG	AAG	CAA	ATT	AAA	GCT	GAT	CCG	TGC	TAA	GG/	AGA	VAGA	CAG	TGG	CCA	TAT
	I	Q	Ε	I	R	Y	R	S	K	L	K	L	I	R	A	K	Ε	Ε	D	S	G	Н	Y
1381	AC	TAT	TGT	AGC	TCA		TGA	AGA	TGC	TGT	GAA	GAG	CTA	TAC	П	TGA	ACT	GTT	AAC	TCA	AGT	TCC	TTCA
	T	I	٧	Α	Q	N	Ε	D	A	٧	K	S	Y	T	F	Ε	L	L	T	Q	٧	P	S
1450	TC	CAT	TCT	GGA	CTT	GGT	CGA	TGA	TCA	CCA	TGG	СТС	AAC	TGG	GGG	ACA	GAC	GGT	GAG	GTG	CAC	AGC	TGAA
		I													G				R			A	
1519	GG	CAC	GCC	GCT	TCC	TGA	TAT	TGA	GTG	GAT	GAT.	ATG	CAA	AGA	TAT	TAA	GAA	ATG	TAA	TAA	TGA	AAC	TTCC
	G	T	Р	L	P	D	I	Ε	W	M	I	С	K	D	I	K	K	С	· N	N	E	T	S
1588	TG	GAC <sup>*</sup>	TAT	П	GGC	CAA												CCG	AGA	CAG	GAG	TAC	CGTG
	W	T	I	L	Α	N	N	٧	S	N	I	I	T	Ε	I	Н	S	R	D	R	S	T	٧
1657	GAG	GGG	CCG	TGT	GAC <sup>*</sup>	ПТ	CGC	CAA	AGT	GGA	GGA	GAC	CAT	CGC	CGT	GCG	ATG	ССТ	GGC	TAA	GAA	тст	сстт
	Ε	G	R	٧	T	F	Α	K	٧	Ε	E	T	I	Α	٧	R	С	L	Α	K	N	L	L
1726	GG/	AGC1	rga(	GAA(	CCG	AGA	GCT	GAA	GCT	GGT	GGC	TCC	CAC	ССТ	GCG	TTC	TGA	ACT	CAC	GGT	GGC	TGC	TGCA
	G	Α	Ε	N	R	Ε	L	K	L	٧	Α	Р	T	L	R	S	Ε	L	T	٧	Α	Α	Α .
1795	GTO	CCTO	GTO	GCT(	STT	GGT	GAT	TGT	GAT	CAT	CTC	ACT	TAT	TGT	ССТ	GGT	TGT	CAT	TTG	SAA	ACA	GAA	ACCG
	٧	L	٧	L	L	٧	I	٧	I	I	S	L	I	V	L	V	٧	I	W	K	Q	K	Р

### Figure 11C

1864	•	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	IA Y	E	AA I	R	GC I W	GGA R	GGG V	TCA I	TTG E	AAT S	CAA	TCA S	GCC P	CGG.	ATG G	GAC. H	ATG. E	AAT/ Y	ATAT I	/TTI Y	ATG1 V	rgga( D
1933	0	CG	AT(	GCA	GCT	ΓGC(	СТТ	ATG	ACT	CAA	GAT	GGG	AGT	ПС	CAA	GAG	ATG	GAC	TAG	TGC	ΠG	STCO	GG1	СТТ
2002	•																			L	_	• •	-	_
2002	G	66	S	G	AGC A	F	I I G	GGA K	AGG V	TGG V	HG	AAG G	GAA T	CAG A	CCT. Y	ATG( G	GAT L	TAA( S	GCC( R	GGT( S	Q Q	ACC P	TGT: V	CAT(
2071	A	AA(	GTT	rgc •	AGT	GA/	AGA	TGC	TAA	AAC	CCA	CGG	CCA	GAT	CCA	GTG/	₩,	VACA	VAG(	стст	CAT	GTC	TGA	ACTO
03.40																								. <b>L</b>
2140	K	AGA 1	\	M	T	Н	L	G	GGC( P	CAC. H	AII L	IGA N	ACA I	I IG	TAA. N	ACT L	TGCT L	rgge G	SAG( A	CCTO C	CAC T	CAA K	GTC S	AGG(
2209	C	CC/	AΠ	TA( Y	CAT	CAT	CA(	CAG/ F	AGT/	ATTO	GCT	TCT	ATG(	SAG/	ATT	TGGT	TCA/	ACTA	٦Π	rgca H	TAA	GAA	TAG R	GGAT D
2278																							••	TGAT
2270	S	F		L	S	Н	Н	P	E	K	P	K	K	E	L		I	F		L L	N N	P		
2347	G/	444	GC	ACA	ACG	GAG	CTA	TGT	ΓŢΑΊ	щ	ΓΑΤ	CTT	LLC/	W	ACA/	ATGO	STG/	CTA	CAT	GGA	CAT	GAA	GCA	GGCT
																				D				
2416	G/ D	ATA T	CT	ACA T	ACA Q	GTA Y	TGT V	CCC P	CAT M	rgc1 L	FAG/ E	AAA( R	GA/ K	VAGA E	\GGT V	ПТС \$	TAA K	ATA Y	STTC	CGA D	CAT I	CCA Q	gag R	ATCA S
2485	CT	CT.	ΑT	GAT	CG	TCC	AGC	CTC	ATA	TA4	\GA/	\GA/	MTC	TAT	GΠ						AAA	CCT	ССТ	ПСА
									Y						_		S		-		N	_	_	_
2554	GA D	TG. D	AT.	aac N	TC/ S	AGA E	AGG G	CCT L	TAC T	TTT L	ATT L	TGGA D	L L	GTT L	GAG S	CTT F	CAC T	CTA Y	TCA Q	AGT V				4ATG M
2623	GA	GT	Π.	ПG	GCT	TC		AAA	ΠG	TGT	CCA	CCG	TGA	TCT	GGC	TGC	TCG	CAA	CGT	CCT	ССТО	GGC/	ACA/	AGGA
																				L			-	
2692	AA K	AA I	Π(	GTG /	aag K	AT( I	CTG C	TGA D	CTT F	TGG <b>G</b>	CCT L	GGC A	CAG R	AGA D	CAT I	CAT	GCA H	TGA D	TTC S	GAA( N	CTAT	rgt( <b>V</b>	STCC S	BAAA K
2761	GG	CAG	ATE	CC.	П	CTO	GCC(	CGT	GAA	GTG	GAT	GGC	TCC	TGA	GAG	CAT	CTT	TGA	CAA	ССТО	CTAC	CACC	CACA	CTG
	u	3	i	1	Γ_	L	۲	V	K	W	M	Α	۲	Ł	5	I	F	D	N	L	Y	T	T	L

#### Figure 11D

2830				CTG W										CTT F							TTA Y		CGGC
2899		GAT					TT(		CAA' N				-	TGG G					_		TGA D	CCA H	CGCT A
2968				AGT V		CGA E	GAT I		GGT( <b>V</b>	gaa K		CTG W	gaa N	CAG S	TGA E	GCC P		GAA K	gag R	ACC P	CTC S	CTT F	TTAC Y
3037				TGA E	-									ATA Y						aaa K		TCA H	CCTG L
3106		CTT( F				TGA D	CCA <sup>*</sup>		TGC <sup>*</sup> A		GGC. A		CAT(		TGT(	GGA D	CTC. S	AGA D	CAA N	TGC. A		CAT I	TGGT G
3175	-													GGA E									GAGC S
3244				TGG(								CAT I		CCC <sup>-</sup>							CCT L		CAAG K
3313	AG(			ACA( H				GAC(			AGA( E					GAC T	-	TTC S					CTTC F
3382		CAA( K					GAC(				CAT(	-	CAT(		GGA(		CAT		CAT. I	AGA D		TTC. S	AGAC D
3451	CT( L			AGA( D		F			ACT(	GGC	GGA <sup>*</sup>	TTC	GAG	GGG <sup>-</sup>	TTC	СТТ	CCA	CTT	CTG	GGG	CCA	CCT	CTGG
3520	ATO	CCC	STT	CAGA	<b>W</b>	ACC/	ACT	ITA.	LTG(	CAA	TGC	GGA	GGT	TGA	GAG	GAG	GAC	TTG	GTT	GAT	GTT	TAA	AGAG
3589																							CTTT
3658																							GATA
3727																							ACAA
3796																							ATTG
3865																		-					CCTG
3934																				<b>AAA</b>	AUU	IAC	TGGT
4003	AU	AIA	NGL/	1118	HG	JIA	ICI		IA	alG	ΙIΑ	<b>VAG/</b>	NGA	TAA	<b>46A</b>	MIP	٩IA	46					

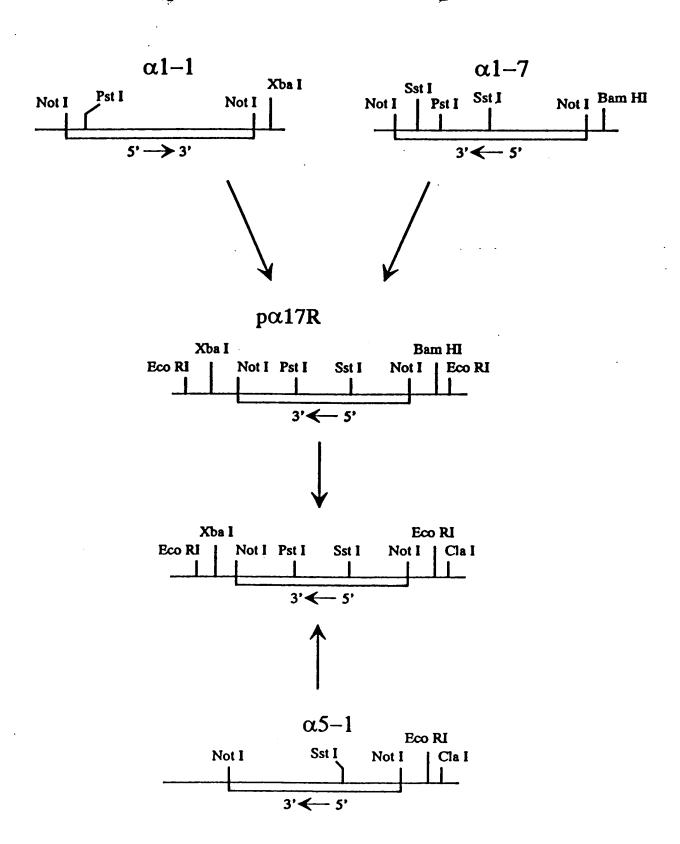


Figure 12